

IX.4.1A-SHEF-SHEFOUT STANDARD HYDROLOGIC EXCHANGE FORMAT (SHEF) FILE  
SHEFOUT

Purpose

File SHEFOUT contains the output from the Standard Hydrologic Exchange Format (SHEF) decoding program that is used as input to the SHEF posting program.

Description

ATTRIBUTES: fixed length 208 byte binary records

RECORD STRUCTURE:

There is one record for each piece of data. The data are all the descriptive information from the SHEF message even though some of it is not used by the posting program. All times are in GMT and all units are English.

<u>Word Position</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
1-2	A8	1	Station identifier
3	I*4	1	Year of observation date (4 digits)
4	I*4	1	Month of observation date
5	I*4	1	Day of month of observation date
6	I*4	1	Hour of observation (range of 0-23)
7	I*4	1	Minutes of observation date
8	I*4	1	Seconds of observation date
9	I*4	1	Year of creation date (4 digits)
10	I*4	1	Month of creation date
11	I*4	1	Day of creation date
12	I*4	1	Hours of creation date
13	I*4	1	Minutes of creation date
14	I*4	1	Seconds of creation date
15	A1	1	First character of Physical Element code
16	A1	1	Second character of Physical Element

<u>Word Position</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
			code
17	I*4	1	Encoded duration code <u>1</u> /
18	A1	1	Type code
19	A1	1	Source code
20	A1	1	Extreme code
21	R*4	1	Probability code <u>2</u> /
22-23	R*8	1	Data value (double precision)
24	A1	1	Data Qualifier
25	I*4	1	Revision code: 0 = not a revision 1 = revision
26-27	A8	1	Data source
28	I*4	1	Time series indicator: 0 = not a time series 1 = first element in a time series 2 = subsequent element
29-30	A7	1	Full parameter code
31-32	A8	1	Unused
33-52	A80	1	Comment information for data value found in SHEF message

Notes:

1/ Duration codes specify units and number as follows:

OXXX minutes  
 1XXX hours  
 2XXX days  
 3XXX months  
 4XXX years  
 5000 unspecified  
 5001 seasonal  
 5002 entire period of record  
 5004 time period beginning at 7AM local time prior to the  
 observation and ending at the observation time  
 5005 unknown  
 6XXX months - end of month

Where XXX is the number of units. For example eight days would be

coded as 2008 and instantaneous as 0000.

2/ Probability codes are a decimal value where 50 percent = 0.5. The mean (P code of M) is coded as -.05. If the Probability code is unspecified it is -1.0.